

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/911,673	07/24/2001	Taro Endo	01430/LH	3874	
1933	7590 08/23/2005		EXAMINER		
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC 220 5TH AVE FL 16			NGUYEN,	NGUYEN, KEVIN M	
	NEW YORK, NY 10001-7708		ART UNIT	PAPER NUMBER	
			2674		
			DATE MAILED: 08/23/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		1 4 1 4 1				
	Application No.	Applicant(s)				
065 4-45 0	09/911,673	ENDO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Kevin M. Nguyen	2674				
The MAILING DATE of this communicat Period for Reply	ion appears on the cover sheet wit	th the correspondence address				
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA: Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communica: If the period for reply specified above is less than thirty (30) dated if NO period for reply is specified above, the maximum statutor Failure to reply within the set or extended period for reply will, I Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	TION. CFR 1.136(a). In no event, however, may a reation. ys, a reply within the statutory minimum of thirty y period will apply and will expire SIX (6) MONT by statute, cause the application to become ABA	oply be timely filed ((30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed o	n <u>07 June 2005</u> .					
2a)⊠ This action is FINAL . 2b)[This action is FINAL . 2b) This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>6,7,9,11,13-21 and 26</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>6,7,9,11,13-21 and 26</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction	and/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Ex	caminer.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by	the Examiner. Note the attached	Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority doc	•	· · · · · · · · · · · · · · · · · · ·				
3. Copies of the certified copies of the		received in this National Stage				
application from the International * See the attached detailed Office action fo		rappiyad				
See the attached detailed Office action to	r a list of the certified copies flot r	eceiveu.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Su	ummary (PTO-413)				
2) 🔲 Notice of Draftsperson's Patent Drawing Review (PTO-9	48) Paper No(s)	/Mail Date				
 Information Disclosure Statement(s) (PTO-1449 or PTO- Paper No(s)/Mail Date 	(SB/08) 5) ☐ Notice of Int	formal Patent Application (PTO-152) _·				

Art Unit: 2674

DETAILED ACTION

1. This office action is made in response to applicant's amendment filed on June 07, 2005. Claims 1-5, 8, 10, 12, 22-25 are cancelled, claim 6 is amended, claims 7, 9, 11, 13-21 and 26 are previously presented, and claims 6, 7, 9, 11, 13-21 and 26 are currently pending in the application. An action follows below:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 6, 7, 9, 11, 13, 16, 17 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Frederick et al (previously cited, US 6,314,479).
- 3. As to claim 6 (currently revised), Frederick teaches a display system comprising:
 - a. a host apparatus (a host computer 14, fig. 6) has a digital graphic display (TDMS) (46) (an image output as claimed), and a communication interface 35 (an image output interface, fig. 6, col. 7, lines 34-45);
 - b. A/V display 12 (a display apparatus as claimed, fig. 6) which is operated by supply RGB video data (at least one of a video signal as claimed, table 4, lines 46-48) and +5 voltage DC (power as claimed, table 5, line 14) input to display (from the host apparatus as claimed, table 5, line 14);

Art Unit: 2674

c. The PC theatre communication interface 35 communicates between the PC 14 and display 12 (a communication interface as claimed, fig. 6, col. 7, lines 34-35);

The "plus and display" display 12 (the display apparatus as claimed, fig. 6) comprises:

An Extended Display Identification Data (EDID) is utilized to communicate the display's capabilities to the PC 14. This information is stored in the display 12 as a condensed memory block (col. 11, lines 2-5);

The personal computer (PC) 14 reads the (EDID) from the display 12 to determine the supported Display Power Management Signaling (DPMS)

modes (col. 14, lines 59-60); [a storing section for storing power

consumption data as claimed];

Both analog and digital displays go into a low power state if any of the video data or timing signals are out of range or are invalid. It is recommend that an on screen display (OSD) be used to communicate the problem to the consumer (col. 15, lines 10-13);

Referring to Fig. 6, Frederick et al expressly show that Identification (EDID/DDC2B) are transmitted on a bus (50) from the display 12 to the host computer (PC) 14; [storing section for storing on-screen display information as claimed];

the host computer (PC) 14 (the host apparatus as claimed, fig. 6) comprises:

Art Unit: 2674

the PC 14 (a host-side communication section as claimed, fig. 6) for receiving the Identification (EDID/DDC2B) including DPMS modes (the power consumption data as claimed) on a bus (50) from the display 12 (see fig. 6), and including the low power state (DPMS modes, the power consumption data as claimed) if any of the video data or timing signals are out of range or are invalid. It is recommend that the on screen display; it is advantageous for the controls lists in the Table 10 to be supported by the PC 14, power control for system (table 10, col. 14, line 19); on-device-display main menu (on screen display information as claimed, table 10, col. 14, line 21). Thus, the on-device-display main menu (an information superimposing section as claimed) is superimposing on a whole screen display (on the video signal as claimed).

- 4. As to claims 7 and 26 (original), Frederick teaches a display system associated with a method, the display system comprising:
 - d. a host apparatus (a host computer 14, fig. 6) has a digital graphic display (TDMS) (46), and a communication interface 35 (an image input interface, fig. 6, col. 7, lines 34-45).
 - e. The digital graphic display signals are transmitted on a TDMS line 46 (fig. 6, col. 7, lines 45-46).
 - f. The PC theatre communication interface 35 communicates between the PC 14 and display 12 (fig. 6, col. 7, lines 34-35).

Art Unit: 2674

g. It is recommended that an <u>OSD</u> be used to communicate the problem to the consumer (col. 15, lines 10-13). The OSD is defined an information superimposing section.

- h. The PC 14 reads the EDID filed stored in the display 12 over the DDC interface which is defined said display apparatus further comprises a memory, (block 60), col. 10, lines 51-52. The PC 14 requests status of the display 12 over the DDC-2B interface (block 72), col. 10, lines 62-63.
- i. Thus, the power state, the OSD, the EDID and the status are defined said host-side communication section receives said on-screen display information.
- 5. As to claim 9, Frederick teaches the interface 35 which is implemented using DDC-2B and UBS communication links. The VESA DDC-2B standard is a simple interface that is based on the I2C bus (col. 9, lines 59-61).
- 6. As to claim 11, Frederick teaches the display mode which controls in the VESA Monitor Control Command Set (MCCS) can be used by the PC 14 to enable these display video (col. 15, lines 23-25).
- 7. As to claim 13, Frederick teaches the power LED on the front panel which is extinguished or changes color (col. 15, lines 5-7).
- 8. As to claims 16 and 17, Frederick teaches OSD are displayed on the display monitor 12. Menu initiates on-device-display menu (see table 10, col. 14, line 21). Thus, it is obvious to provide inherent ASCII text data.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. <u>Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable</u> over Frederick in view of Uhlin (previously cited, US 5,630,043).
- 10. As to claims 14 and 15 (original), Frederick teaches all of the claimed limitation of claims 5 and 7, except for a first memory for storing on-screen display information, and a second memory for storing the on-screen display information... the indicatable bit map information.

However, Uhlin teaches superimposed with texture map 344 (OSD information) from off-screen memory portion 342 (a first memory) of video memory 340 and displayed on video display 350 (fig. 3, col. 4, lines 22-24). MPEG decoder 360 decodes and/or decompresses animated texture map data and may store it in frame buffer 370 (a second memory) as decompressed texture map data 371 (OSD information) (fig. 3, col. 4, lines 49-52). The texture map 344 is defined a bit map information.

Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide texture map 344, off-screen memory portion 342, texture map data 371, and frame buffer 370 for Frederick's memory, in view of the teaching Uhlin's reference because this would provide more accurately represent

changes in lighting conditions on both static and dynamic objects as taught by Uhlin (col. 5, lines 55-58).

- 11. Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frederick in view of Rallison et al (previously cited, US 5,991,085).
- 12. As to claims 18-21 (original), Frederick teaches all of the claimed limitation of claims 5 and 7, except for interfacing a plurality of types of display apparatus and a plurality of types of host apparatus. Rallison further teaches interfacing a plurality of types of host apparatus comprising host apparatuses (510, 503), a VCR, a videodisk player, a receiver, a personal computer (see figure 25A).

However, Rallison teaches interfacing a plurality of types of display apparatus comprising a HUD 102, a monitor, and a television 515a (see figure 22).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Frederick's connector including interfacing a plurality of types of display apparatus, and a plurality of types of host apparatus, in view of the teaching in the Rallison's reference, because this would provide a user to utilize different types of display devices and host controllers.

Response to Arguments

13. Applicant's arguments filed June 7, 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that claims 6, 7 and 26 recite "the on-screen display information is transmitted from the display to the host apparatus, where it is superimposed on a video signal and transmitted back to the display apparatus from the

Art Unit: 2674

host apparatus to be displayed." Examiner is not convinced by Applicant's argument. As stated *supra* with respect to claims 6, 7 and 26, Examiner finds that Frederick et al teach

The "plus and display" display 12 (the display apparatus as claimed, fig. 6) comprises:

the display's capabilities to the PC 14. This information is stored in the display 12 as a condensed memory block (col. 11, lines 2-5); the personal computer (PC) 14 reads the (EDID) from the display 12 to determine the supported Display Power Management Signaling (DPMS) modes (col. 14, lines 59-60); both analog and digital displays go into a low power state if any of the video data or timing signals are out of range or are invalid. It is recommend that an on screen display (OSD) be used to communicate the problem to the consumer (col. 15, lines 10-13);

an Extended Display Identification Data (EDID) is utilized to communicate

referring to Fig. 6, Frederick et al expressly show that Identification (EDID/DDC2B) are transmitted on a bus (50) from the display 12 to the host computer (PC) 14;

the host computer (PC) 14 (the host apparatus as claimed, fig. 6) comprises:

the PC 14 (a host-side communication section as claimed, fig. 6) for
receiving the Identification (EDID/DDC2B) including DPMS modes (the
power consumption data as claimed) on a bus (50) from the display 12

(see fig. 6), and including the low power state (DPMS modes, the power consumption data as claimed) if any of the video data or timing signals are out of range or are invalid. It is recommend that the on screen display; it is advantageous for the controls lists in the Table 10 to be supported by the PC 14, power control for system (table 10, col. 14, line 19); on-device-display main menu (on screen display information as claimed, table 10, col. 14, line 21). Thus, the on-device-display main menu (an information superimposing section as claimed) is superimposing on a whole screen display (on the video signal as claimed).

Therefore, the teaching of Frederick et al meets the claimed limitation "the onscreen display information is transmitted from the display to the host apparatus, where it
is superimposed on a video signal and transmitted back to the display apparatus from
the host apparatus to be displayed."

For these reasons, the rejections based on Frederick et al have been maintained.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2674

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Nguyen whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick N. Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Patent Application Information Retrieval system, see http://portal.uspto.gov/external/portal/pair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin M. Nguyen Patent Examiner Art Unit 2674

KMN August 11, 2005

PATRICK N. EDOUARL SUPERVISORY PATENT EXAM